



# Air Conditioning Systems

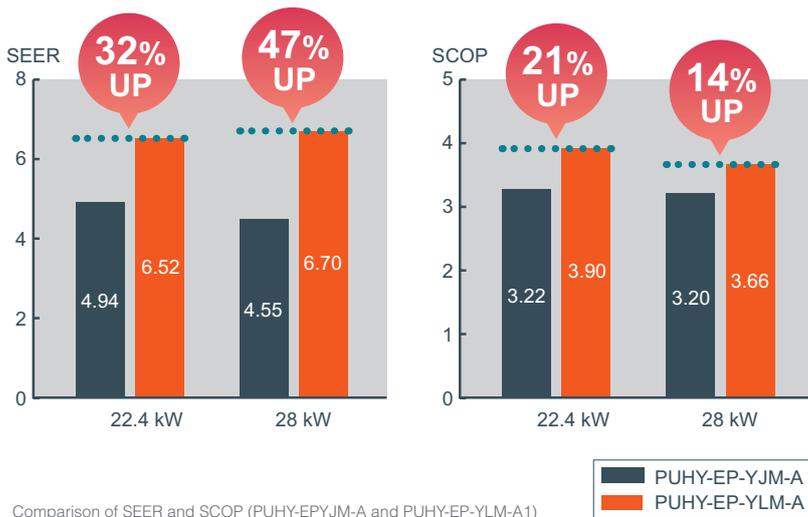
## CITY MULTI

### YLM / YKB SERIES



# City Multi YLM / YKB Series

Mitsubishi Electric City Multi YLM/YKB series has been designed for seasonal performance, making it most efficient in part load conditions which are optimised for the majority of the year. This makes the YLM/YKB ideal for the Australian temperate climate as it provides the highest seasonal efficiencies available.



## Higher efficiency

Designed for seasonal performance. YLM / YKB ensures optimum performance all year round in Australian applications.

The improvements offer higher energy efficiencies compared to the previous City Multi systems.

Comparison of SEER and SCOP (PUHY-EP-YJM-A and PUHY-EP-YLM-A1)

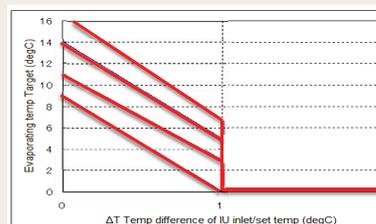
## Evaporating temperature control

Two optional solutions to improve comfort delivered into the building.

1. Increase and fix system evaporating temperature to enable increased indoor unit SHF, air off temperature conditions and therefore higher efficiency and comfort.

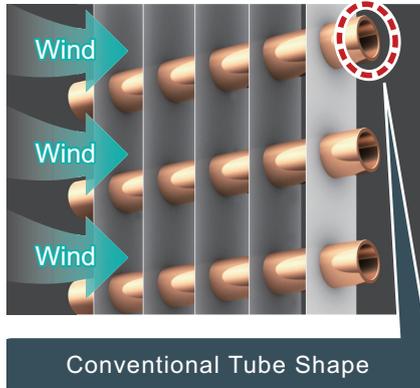
SW4(897)	0(OFF)	1(ON)	0(OFF)	1(ON)
SW4(900)	0(OFF)	0(OFF)	1(ON)	1(ON)
Tem	0	+6	+9	+14

2. Automated dynamic control of refrigerant evaporating temperature based on internal load, provides added comfort whilst improving seasonal efficiency by 8%.

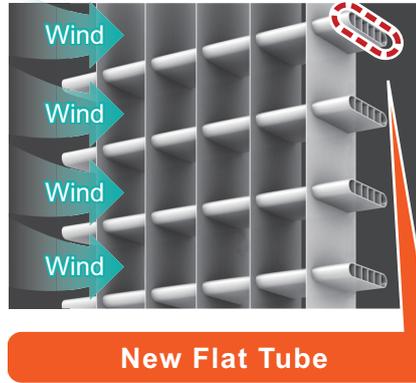


## Flat tube aluminium heat exchanger

The world-first<sup>\*</sup> flat tube aluminium heat exchanger significantly improves heat exchange performance achieving high SEER/SCOP and high air conditioning capacity. (PUHY/PURY-EP-Y(S)LM-A(-BS) only)



Conventional Heat Exchanger



Flat-tube Heat Exchanger

The heat exchanger of the outdoor unit has been drastically changed. Our new outdoor unit model uses the world-first<sup>\*</sup> aluminum flat-tube heat exchanger. The flat tubes can reduce airflow resistance and the larger number of tubes can be installed in the flat-tube heat exchanger. Compared to the conventional heat exchanger that can increase the surface area which is in contact with the refrigerant the heat exchange performance can be greatly improved. Our new air conditioner can operate at higher SEER/SCOP and maintain the required cooling/heating capacity.

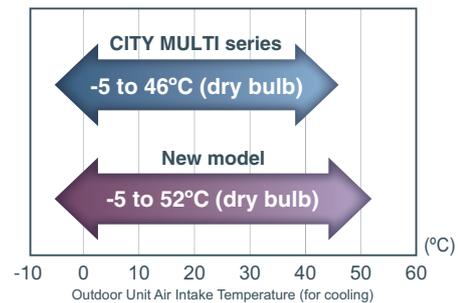
<sup>\*</sup>: As of October 2013 (according to our Mitsubishi Electric, Japan survey); for VRF Systems

## Wider operating range

The new model can work in cooling mode successfully even at high ambient temperature.

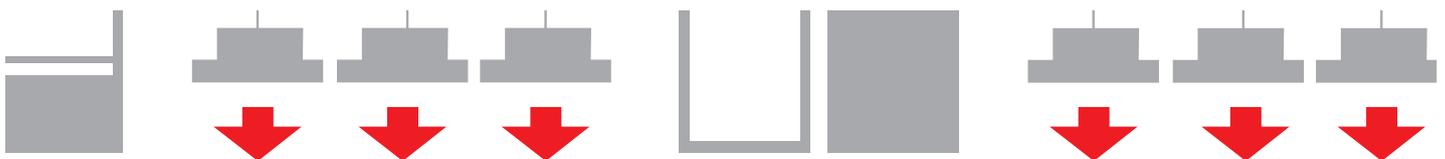
Enhancement in performance in consideration of the actual installation environment of the outdoor unit - expands the cooling operation temperature range up to the ambient temperature of 52°C

(PUHY-EP-Y(S)LM-A(-BS) and PUHY-P-Y(S)KB(-BS) only)



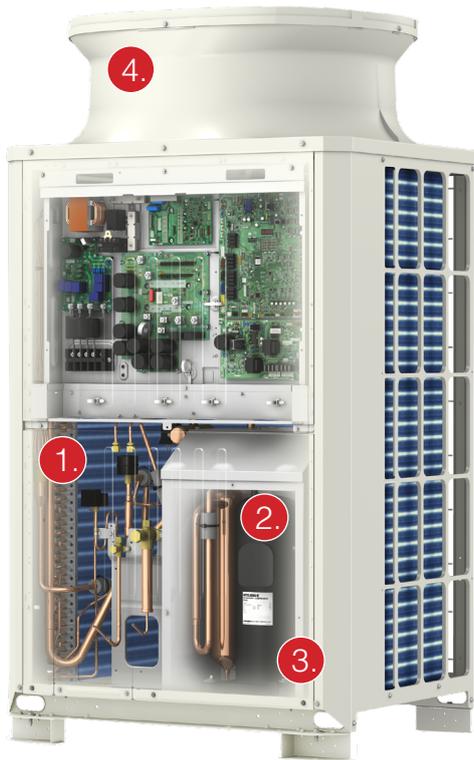
## Continuous heating during defrost

To improve comfort in winter, the outdoor units continue to provide indoor units heat during defrost cycle by utilising hot gas defrost technology.



- » Outdoor unit heat exchanger is split in two
- » Hot gas defrost operates down to 1°C outdoors
- » Below this reverse defrost operates
- » One half continues to provide heat to indoor units
- » One half defrosts

- » Two or three module systems
- » One module defrost
- » The other module continues to provide heat to indoor units
- » Modular hot gas defrost operates down to -5°C outdoor
- » Below this reverse defrost operates



**1. Improved flow distribution of refrigerant circuit**

Maximum energy transfer with minimal input

**2. Reduced standby power by up to 50%**

Using induction heated compressor

**3. New compressor**

Designed for partial load, thus higher seasonal efficiency

**4. Redesigned bell-mouth grille**

Reduced static pressure losses, minimising power input of new DC fan motor

Available for: Y Series YBK & EP-YLM / R2 Series P-YLM & EP-YLM

**Standard**

» PUHY-P... YKB-A (-BS) 22.4 kW to 151.2 kW

**High COP**

» PUHY-EP...Y(S)LM-A1 (-BS) 22.4 kW to 151.2 kW

**CITY MULTI**

Heat Pump

Y SERIES

**Standard**

» PURY-P... YLM-A (-BS) 22.4 kW to 101 kW

**High COP**

» PURY-EP...YLM-A1 (-BS) 22.4 kW to 101 kW

**CITY MULTI**

Heat Recovery

R2 SERIES



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